

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-006004**Date Inspected:** 02-Apr-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1830**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 630**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Li Hong Fei & Wan Wen Zhong			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>	
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>

**Bridge No:** 34-0006**Component:** Tower and OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector performed Ultrasonic Testing (UT) on approximately 15% of CJP on the OBG 1AE Floor Beam welds previously accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. The QA Inspector observed no rejectable indications at the time of testing. The QA Inspector generated a TL-6027 UT report on this date. Welds UT verified were identified as listed below

Bay 2

SSD37-PP010-157

SSD37A-PP010-157

This QA Inspector observed the following work in progress:

Bay 2

ZPMC's qualified welding personnel's are identified as Mr. Guo Lujun (207540) perform SMAW (tack) welding on weld joints identified DP575A+DP500A-SEG003\*-034. ZPMC QC identified Mr. Li Zhi Jiang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to

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be in general compliance with WPS-B-P-2111-B-U2.

ZPMC's qualified welding personnel's Mr. Yan Shitian (062708) perform FCAW welding on weld joint identified as SSD37A-PP10-284. ZPMC QC identified Mr. Shi Lei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-Tc-U4b-F.

### Bay 3

ZPMC's qualified welding personnel's Mr. Liu Kaige (044830) and Mr. Chen Chuanzong (044824) perform FCAW welding on weld joint identified as CA034-041, 042 and FB010-024,045 (repair). ZPMC QC identified Mr. Chen Xi was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-Tc-U4b-F and WPS-345-2G (2F)-repair.

### Bay 10

ZPMC's qualified welding personnel's are identified as Mr. Fang Kaiyuan (040267) and Mr. Wang Ziwei (043727) perform SMAW welding on weld joints identified SSD1-TL5F/L-143 (repair) and NSD1-TL8B/L-3A. ZPMC QC identified Mr. Wan Wen Zhong was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-1G (1F)-repair and WPS-B-P-2212.

ZPMC's qualified welding personnel's are identified as Mr. Yu Chaoye (053869), Mr. Tao Qan (040457) perform FCAW welding on weld joints identified SSD1-TL5F/L-143. ZPMC QC identified Mr. Wan Wen Zhong was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-C-U2-F.

### Bay 11

ZPMC's qualified welding personnel's are identified as Mrs. Yang Meizhen (042195), Cao Xiaohua (056975) and Mr. Li Xiaoqing (044560) performing groove welding of weld joint ESD1-FDSA3-2B/C-24B, ESD1-FDSA3-2B/C-50B and WSD1-FESA3-2A/D-3A. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process. ZPMC QC identified Mr. Li Hong Fei and was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-U3c-S-2.

ZPMC's qualified welding personnel's are identified as Mr. Xie Zhong Cheng (041271) perform SMAW welding on weld joint identified as ND1-A478-33M-1-28B, 6A and 1A. ZPMC's QC identified Mr. Li Hong Fei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-3212-TC-U5b-1.

ZPMC's qualified welding personnel's identified as Mr. Wang Yinsheng (040775) and Mr. Zhang Binghua (053316) perform FCAW welding on weld joints identified ESD1-FASA3-2E/E-44B and ESD1-FASA3-2E/E-4B. ZPMC QC identified Mr. Yun Xian was present to monitor the welding process. The welding parameters as

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measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-Tc-U5b-F

Bay 13

ZPMC's qualified welding personnel's identified as Mr. Zhu Zezhou (066482), Mr. Zhu Bensheng (068047) and Yang Hong Jun (070254) perform FCAW welding on weld joints identified CA026-004. ZPMC QC identified Mr. Shi Lie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-Tc-U4b-F.

ZPMC qualified welding personnel identified as Mr. Dong Yonglun (067588) and Mr. Chang Zhanchi (200432) perform SMAW welding and tack welding on weld joints identified CSD4-PP38-069,070, 132, 133, 071, 072, 068, 134, 073, 074 and SEG032\*-028-075. ZPMC QC identified Mr. Shi Lie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2113-FCM and WPS-2213-B-U2.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (134-8257-0045), who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Alaniz,Joe	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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